

II. REMARKS

Claims 1-12 are presently pending in this application. Claims 1-12 stand variously rejected under 35 U.S.C. §§ 112, 102 and 103. These rejections are believed to be overcome by the above amendments and are otherwise traversed for reasons discussed below.

Applicants note with appreciation the withdrawal of the previous rejection under 35 U.S.C. §112, second paragraph, as well as the previous rejection of claims 1-3 under 35 U.S.C. §102(b) over Williams et al.

Overview of the Above Amendments

Claims 1-6 have been amended to claim the subject invention with greater particularity. The claims are now all framed with reference to the nucleotide sequence rather than the amino acid sequence shown in Figures 4A-4C. In this regard, applicants have substituted the nucleotide position numbers corresponding to the amino acid positions previously recited. Further support for this amendment may be found in Figures 4A-4C, as well as at page 18, lines 13-15 and lines 26-28. Moreover, the percent identity recited in claims 1 and 4 is now "80%." Support for this recitation may be found at, e.g., page 16, line 18 of the application. Finally, the subparts of claim 4 have been redesignated as (i) and (ii) for clarity.

Applicants submit that the above amendments place the application in condition for allowance and do not require a further search. The previous search by the Examiner was based on the nucleotide sequence of SEQ ID NO:1. See, the sequence search provided by the Examiner from the SPTREMBL database. Thus, applicants have amended the claims to reflect the sequence searched by the Examiner. Moreover, the original claims included the terminology "substantially homologous" which terminology is defined in the specification at page 16, line 18 to include sequences with 80% identity

Should the Examiner decide not to enter the amendments, applicants request a telephonic conference with the Examiner and the Examiner's supervisor, Anthony Caputa, in order to discuss the matter further.

Rejections Under 35 U.S.C. § 112, First Paragraph

The rejection of claims 2-3, 5-6, 8-9, and 11-12 under 35 U.S.C. § 112, first paragraph, was maintained. The rejection was based on the use of the terminology "immunogenic" with reference to the amino acid sequence encoded by the claimed polynucleotide. Applicants continue to assert that the claims, as previously written, indeed complied with the requirements of 35 U.S.C. § 112, first paragraph. Nevertheless, the present claims no longer include the language objected to by the Examiner and are now framed with reference to the nucleotide sequence, not the amino acid sequence. Thus, this basis for rejection is believed to be overcome.

Rejections Over the Art

The rejections of claims 1-3 under 35 U.S.C. § 102(b), as allegedly anticipated by Podblielski, *Med Microbiol Immunol* (1994) 183:239-256 ("Podblielski"), and claims 1-12 under 35 U.S.C. § 103(a) over Podblielski and Sambrook, were also maintained. The Office argues: "Podblielski teaches an isolated nucleic acid molecule of the *cf6* gene encoding an immunogenic group B *Streptococcus* CAMP factor amino acid sequence having at least 10 contiguous amino acids 100% identical to the sequence of SEQ ID NO:2." Applicants note that the search results provided by the Patent Office show a comparison of the nucleotide sequence from SEQ ID NO:1 of applicants' application and the nucleotide sequence of Podblielski, but fail to show an amino acid to amino acid comparison of the sequence of SEQ ID NO:2 of the application to that of Podblielski. Accordingly, applicants can only guess at the regions of amino acid sequence homology

fragments and therefore clearly are not anticipated by Podblielki's sequence which, according to the SPTREMBL search, is only 64.9% identical to applicants' sequence.

Neither are the claims rendered obvious by Podblielki and Sambrook.

Applicants reiterate that Podblielski's sequences are all derived from either of *Streptococcus agalactiae* or *Staphylococcus aureus* and not *S. uberis*. Podblielski does not disclose or suggest *S. uberis* sequences as claimed or cloning such sequences. To the best of applicants' knowledge, no one had cloned and expressed CAMP factor proteins from *S. uberis* prior to applicants. Sambrook fails to provide the missing link. Sambrook pertains generally to the field of gene expression, does not in any way pertain to *S. uberis*, let alone *S. uberis* CAMP factor, and therefore does not further elucidate nucleic acid molecules as claimed.

Thus, these bases for rejection are overcome and withdrawal thereof is respectfully requested.

III. CONCLUSION

Applicants respectfully submit that the claims are novel and nonobvious over the art and comply with the requirements of 35 U.S.C. §112. Accordingly, allowance is believed to be in order and an early notification to that effect would be appreciated.

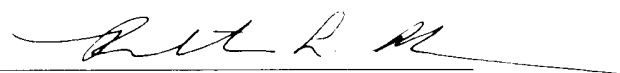
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If the Examiner notes any further matters which he believes may be expedited by a telephone interview, he is requested to contact the undersigned attorney at (650) 325-7812.

Respectfully submitted,

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